

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A method for discovering the topology of a network comprising:

initially resolving the positions of the end stations on the network, and subsequently resolving the topology of the remaining devices on the network.

Claim 2 (Original): A method as claimed in claim 1 in which the step of initially resolving the positions of the end stations comprises, for each managed device, determining which ports are only connected to an end station.

Claim 3 (Original): A method as claimed in claim 1 in which the step of resolving the topology of the remaining devices comprises:

querying for each managed device, which ports have learnt the address of another managed device.

Claim 4 (Original): A computer program on a computer readable medium loadable into a digital computer or embodied in a carrier wave, said program including software for carrying out the method of claim 1.

Claim 5 (Original): A computer program on a computer readable medium loadable into a digital computer or embodied

in a carrier wave, for discovering the topology of a network comprising:

a program step to query a port of a managed device for a first address of any packet which has been received;

a program step for querying the same port of the device for a second address of any packet which has been received;

if there is no second address, returning relevant data to a manager and determining if there is another port on the device;

if there is a second address, determining if there is another port on the device;

if there is another port on the device, repeating the preceding four steps for another port of the managed device;

if not, repeating the preceding five steps in respect of another managed device.

Claim 6 (New): A method for discovering the topology of a network, the method comprising the steps of:

(a) querying a port of a managed device on the network for a first address of any packet which has been received by the managed device;

(b) querying said port of the device for a second address of any packet which has been received by the managed device;

(c) if said second address does not exist, returning appropriate data to a manager and determining if there is another port on the managed device;

(d) if said second address exists, determining if there is said other port on the device;

(e) if said other port exists on the managed device, repeating steps (a) - (d) for said other port; and

Appl. No. 09/662,533

Amdt. dated March 22, 2003

Reply to Office Action of Dec. 3, 2003

PLD
cont.

(f) if said other port does not exist on the managed device, repeating steps (a)-(e) for another managed device on the network.